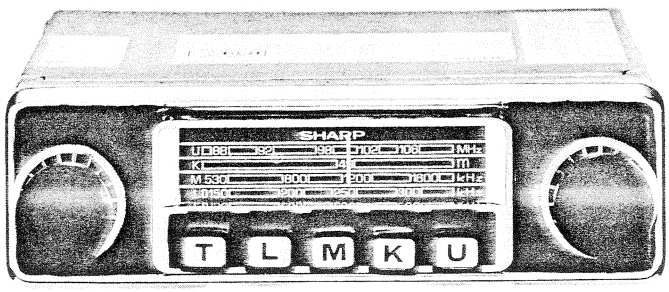
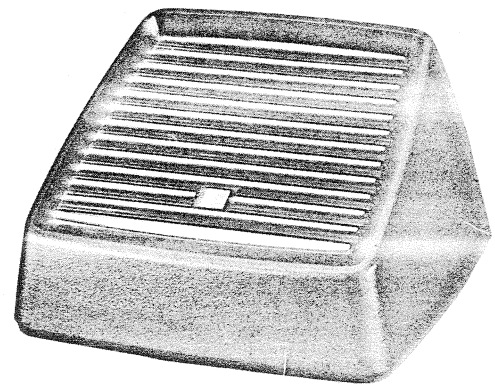
SHARP Service Manual



MODEL AR-943



CP-27

SPECIFICATIONS

Frequency Range
- LW (L) ..... 150 ~ 300 kHz
- MW (M) ..... 520 ~ 1620 kHz
- SW (K) ..... 5.95 ~ 6.2 MHz
- FM (U) ..... 88 ~ 106 MHz

Intermediate Frequency
- AM (LW/MW/SW) .... 452 kHz
- FM ..... 10.7 MHz

Power Output
- Undistorted ..... 5 W
- Maximum ..... 7 W

Speaker ..... 12 cm round type P.D.S. with speaker box (CP-27)
Voice Coil Imp. 4-ohm

Power Supply ..... DC 12 V, Car battery (± earth changeable)

Dimensions ..... 16 cm (W) × 5 cm (H) × 10.6 cm (D)

Weight ..... 1.2 kg

Controls ..... Left : ON/OFF (push)-Volume (rotary)
Right : Tuning
Band Selector (push)
Tone (push)

GENERAL DESCRIPTION

The circuitry used in this 4-band (LW/MW/SW/FM) superheterodyne system car radio incorporates 9 transistors, 16 diodes and 1 IC (integrated circuit).

An external car antenna feeds the AM (MW/SW/LW) broadcasting signal to the AM RF amplifier, AM converter, 2 IF amplifiers and a diode detector.

An external car antenna feeds the FM broadcasting signal to the FM RF amplifier, FM mixer, 4 IF amplifiers and FM detector (2 diodes).

The audio signal passes through the IC (audio amplifier and driver circuits), 2-transistor audio output circuit.

An AM AVC voltage is fed back to the 1st IF amplifier.

An AFC voltage is fed back to the FM oscillator.

SHARP CORPORATION OSAKA, JAPAN

CHASSIS REMOVAL

1) Unscrew set-screws provided one each for the upper and lower cabinets to remove them.
2) Remove the capacitors and leads being connected to the cabinet from P.W. Board.
3) Remove each lead of the output transistor and tuner connected to P.W. Board.
4) Unscrew two set screws fixing the band selector switch at front.
5) Remove four plate springs fixing P.W. Board.
6) Remove the band selector switch and P.W. Board from the cabinet.

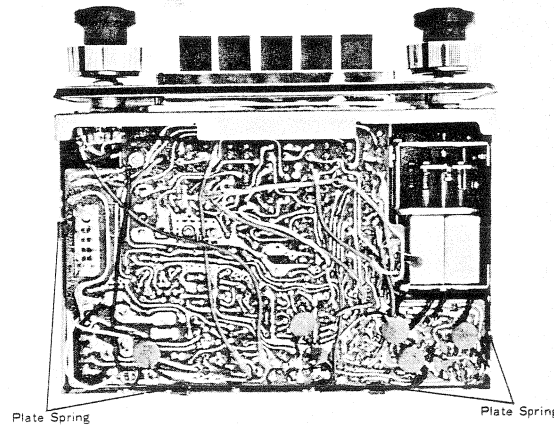


Figure 1 Chassis Removal

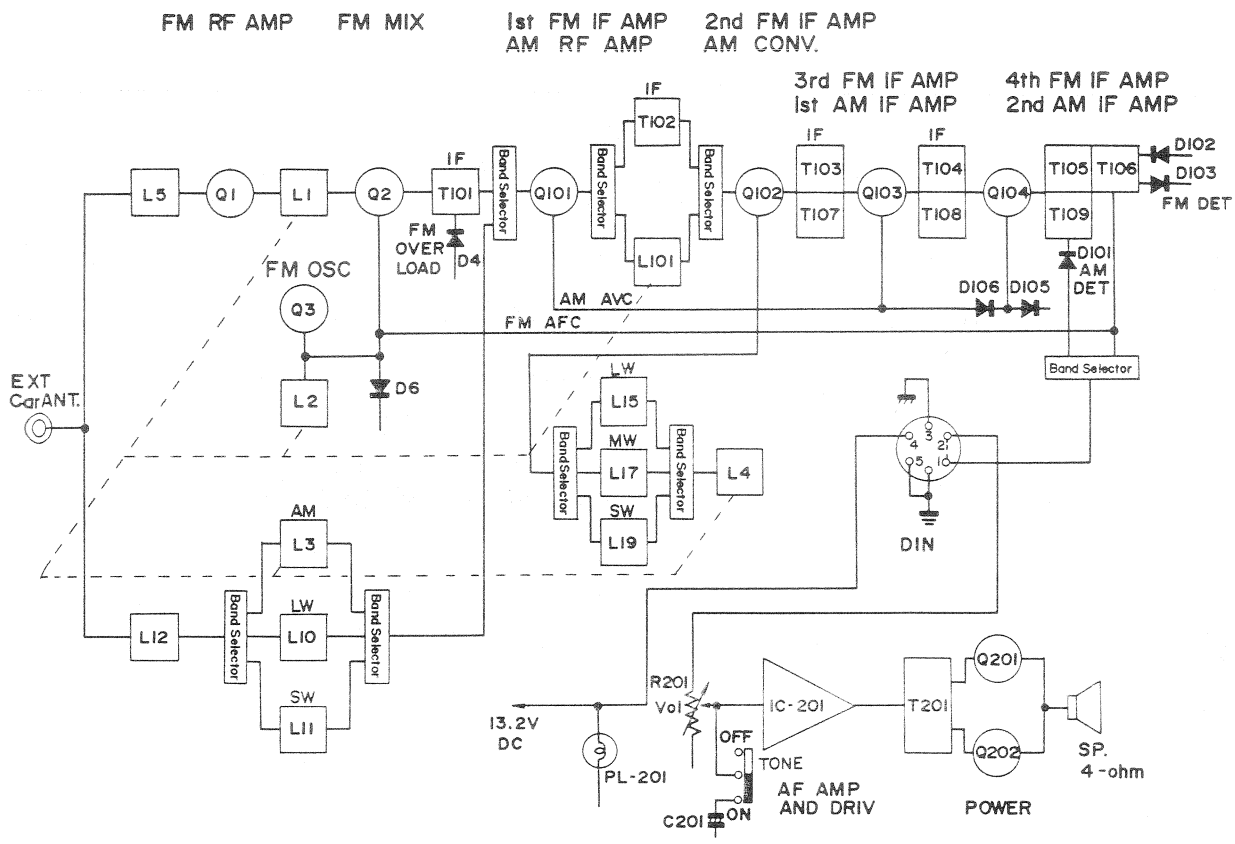


Figure 2 Block Diagram

GENERAL ALIGNMENT INSTRUCTIONS

Should it become necessary at any time to check the alignment of this receiver, proceed as follows;

1) Connect an output meter across the speaker voice coil lugs.
2) Set the volume control at maximum.
3) Attenuate the signals from the generator enough to swing the most sensitive range of the output meter.
4) Use a non-metallic alignment tool.
5) Repeat adjustments to insure good results.

AM IF ALIGNMENT CHART (MW, SW, LW)

STEP	BAND	SIGNAL GENERATOR		RECEIVER		ADJUSTMENT
		CONNECTION TO RECEIVER	INPUT SIGNAL FREQUENCY	DIAL SETTING	REMARKS	
1	MW	Connect signal generator through a dummy to the external antenna. Ground lead to the receiver chassis.	Exactly 452 kHz (400 Hz, 30 %, AM modulated)	Tuning gang fully open. (minimum inductance)	Adjust for maximum output at speaker voice coil lugs.	T1 07 T1 08 T1 09
		Repeat until no further improvement can be made.				

AM RF ALIGNMENT CHART

STEP	BAND	TEST STAGE	SIGNAL GENERATOR		RECEIVER		ADJUSTMENT
			CONNECTION TO RECEIVER	INPUT SIGNAL FREQUENCY	DIAL SETTING	REMARKS	
1	MW	Band Coverage	Connect signal generator through a dummy to an external antenna. Ground lead to the receiver chassis.	Exactly 515 kHz (400 Hz, 30 %, AM modulated)	Tuning gang fully closed. (maximum inductance)	Adjust for maximum output on speaker voice coil lugs.	Oscillator coil L17
2	MW		Same as step 1.	Exactly 1650 kHz (400 Hz, 30 %, AM modulated)	Tuning gang fully open. (minimum inductance)	Same as step 1.	Oscillator trimmer C7
3	MW		Repeat steps 1 and 2 until no further improvement can be made.				
4	MW	Tracking	Same as step 1.	Exactly 1400 kHz (400 Hz, 30 %, AM modulated)	1400 kHz	Same as step 1.	RF trimmer C101 Antenna trimmer C3
5	MW		Repeat until no further improvement can be made.				
6	LW	Band Coverage	Same as step 1.	Exactly 145 kHz (400 Hz, 30 %, AM modulated)	Tuning gang fully closed. (maximum inductance)	Same as step 1.	Oscillator coil (L15)
7	LW		Same as step 1.	Exactly 310 kHz (400 Hz, 30 %, AM modulated)	Tuning gang fully open. (minimum inductance)	Same as step 1.	Oscillator trimmer (C6)
8	LW		Repeat steps 6 and 7 until no further improvement can be made.				

STEP	BAND	TEST STAGE	SIGNAL GENERATOR		RECEIVER		ADJUSTMENT
			CONNECTION TO RECEIVER	INPUT SIGNAL FREQUENCY	DIAL SETTING	REMARKS	
9	LW	Tracking	Same as step 1.	Exactly 160 kHz (400 Hz, 30 %, AM modulated)	160 kHz	Same as step 1.	Antenna trimmer C5
10	LW		Same as step 1.	Exactly 260 kHz (400 Hz, 30 %, AM modulated)	260 kHz	Same as step 1.	Antenna coil L10 RF coil L102
11	LW		Repeat steps 9 and 10 until no further improvement can be made.				
12	SW	Band Coverage	Same as step 1.	Exactly 5.85 MHz (400 Hz, 30 %, AM modulated)	Tuning gang fully closed. (maximum inductance)	Same as step 1.	Oscillator coil L19
13	SW		Same as step 1.	Exactly 6.35 MHz (400 Hz, 30 %, AM modulated)	Tuning gang fully open. (minimum inductance)	Same as step 1.	Oscillator trimmer C8
14	SW		Repeat steps 12 and 13 until no further improvement can be made.				
15	SW	Tracking	Same as step 1.	Exactly 5.95 MHz (400 Hz, 30 %, AM modulated)	5.95 MHz	Same as step 1.	RF trimmer C102
16	SW		Same as step 1.	Exactly 6.2 MHz (400 Hz, 30 %, AM modulated)	6.2 MHz	Same as step 1.	Antenna coil L11
17	SW		Repeat steps 15 and 16 until no further improvement can be made.				

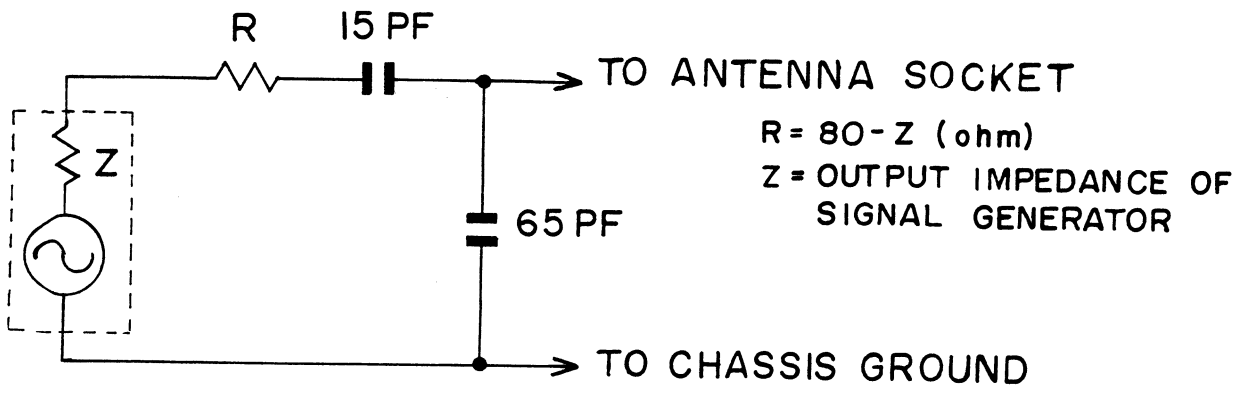


Figure 3 AM Dummy

FM ALIGNMENT CHART

STEP	SIGNAL GENERATOR		RECEIVER		ADJUSTMENT
	CONNECTION TO RECEIVER	INPUT SIGNAL FREQUENCY	DIAL SETTING	REMARKS	
1	Connect signal generator through a 5 PF capacitor to converter emitter to test point TP1 of Q2. Connect generator ground lead to the receiver chassis.	Exactly 10.7 MHz (400 Hz, 30 %, FM modulated)	Tuning gang fully closed. (maximum inductance)	Connect VTVM between test point TP101 and chassis ground.	Detune T105, T106. Tune T101, T102, T103 and T104 for maximum indication.
2	Same as step 1.	Exactly 10.7 MHz (unmodulated)	Same as step 1.	See NOTE.	See NOTE.
3	Repeat steps 1 and 2 until no further improvement can be made.				
4	Connect signal generator through a dummy including output impedance of signal generator to the external antenna. Ground lead of generator connected to the receiver chassis. (Refer to figure 4)	Exactly 87.6 MHz (400 Hz, 30 %, FM modulated)	Tuning gang fully closed. (maximum inductance)	Adjust for maximum output speaker voice coil lugs.	Oscillator trimmer (C2)
5	Same as step 4.	Exactly 106MHz (400 Hz, 30 %, FM modulated)	106MHz	Same as step 4.	RF trimmer (C1)
6	Repeat steps 4 and 5 until no further improvement can be made.				

NOTE 1) Connect VTVM (0.1 volt range D.C. Scale) between test point TP-102 and chassis ground.
2) Adjust T106 for 0 volts on VTVM.
3) Change signal generator frequency 10.7 MHz + 100 kHz and – 100 kHz approximately.
4) Adjust T105 for balanced peaks. Peak separation should be approximately 200 kHz.

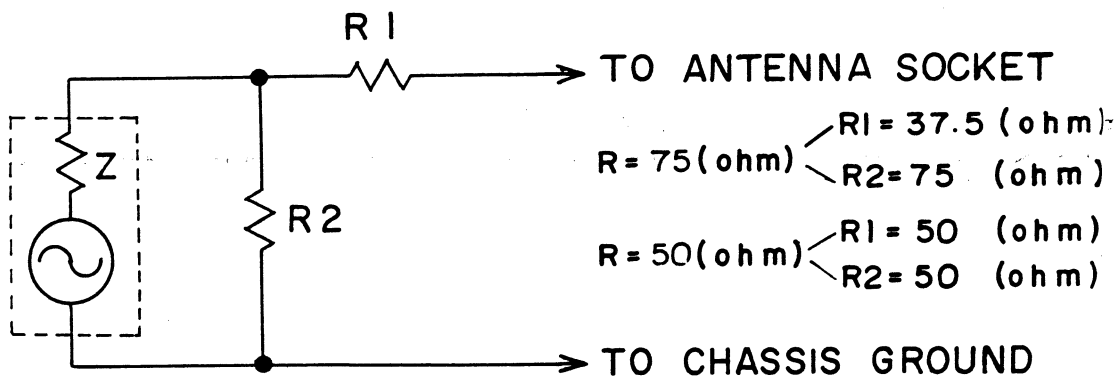


Figure 4 FM Dummy

THE INSTRUCTION OF FREQUENCY ADJUSTMENT

In order to comply with FTZ rule Nr. 358 S757, please fix the low end dial frequency on FM (UKW) band, by adjusting oscillator capacitor (C2) as shown in Figure 13. Adjustment is made to get a peak reception of a generated standard signal at the frequency of 87.5 MHz.

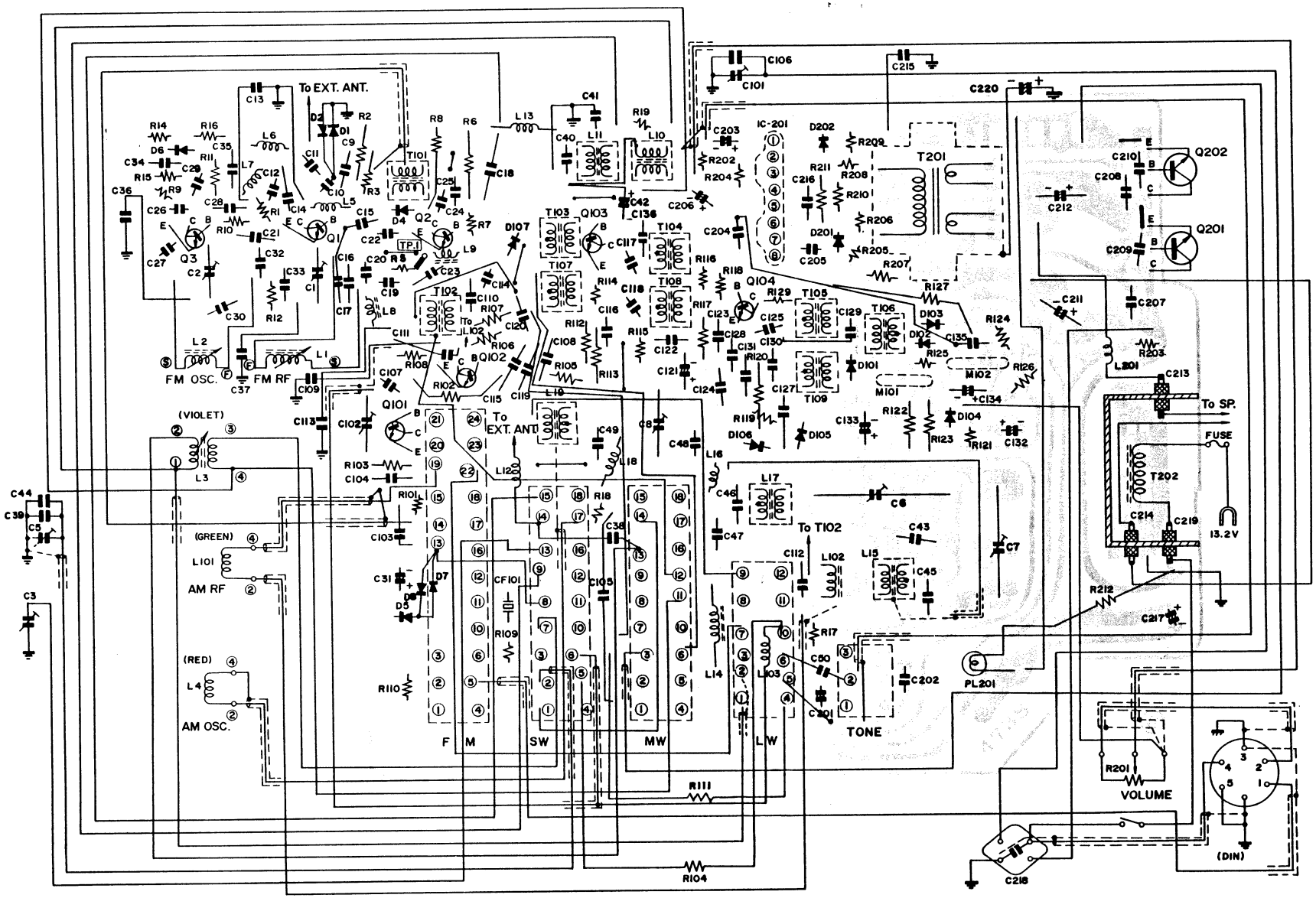


Figure 5 Wiring Side of P.W. Board

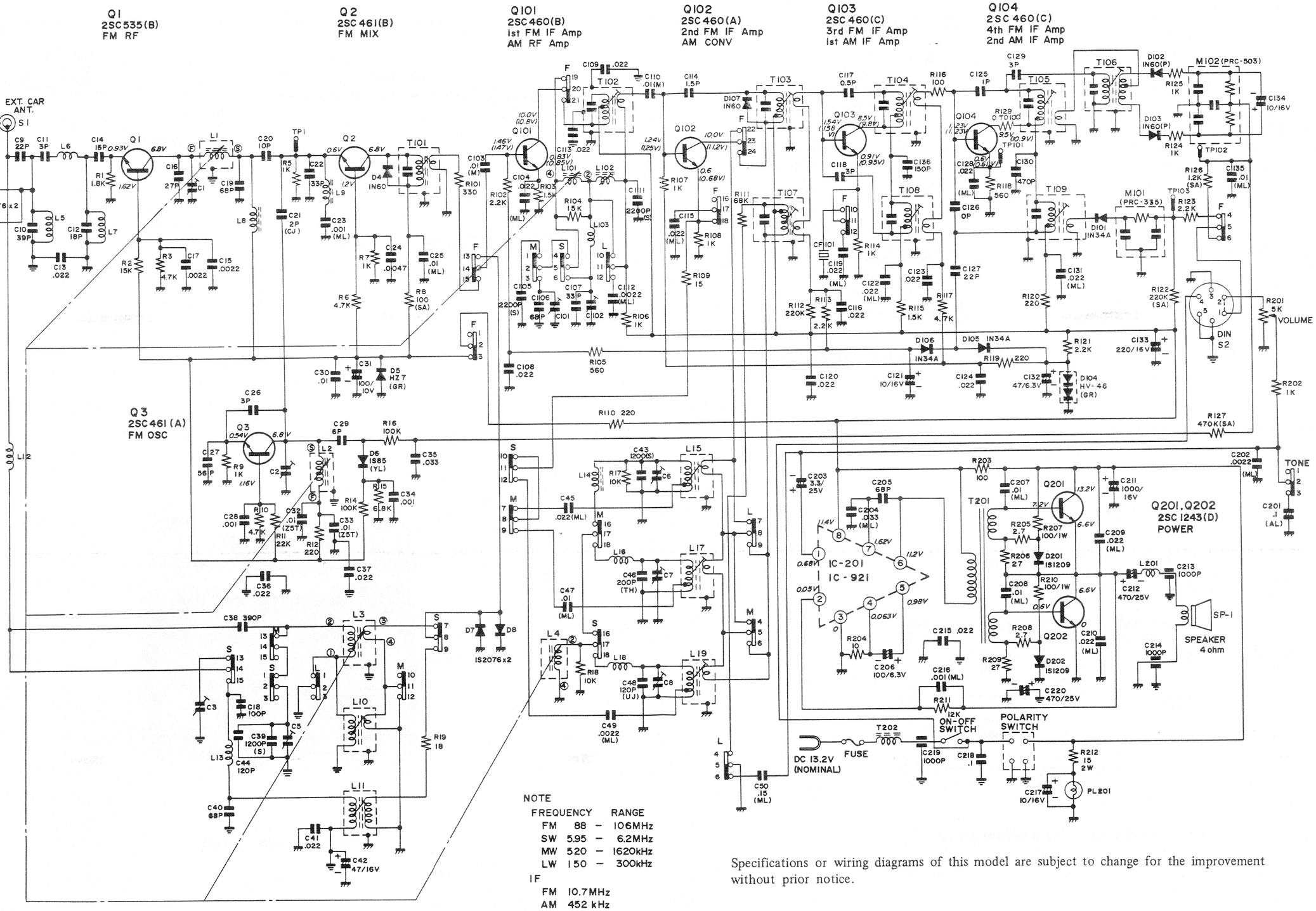


Figure 6 Schematic Diagram

Specifications or wiring diagrams of this model are subject to change for the improvement without prior notice.

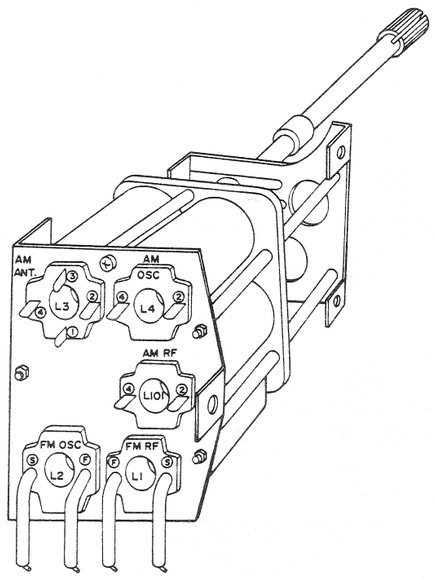


Figure 7 Tuner

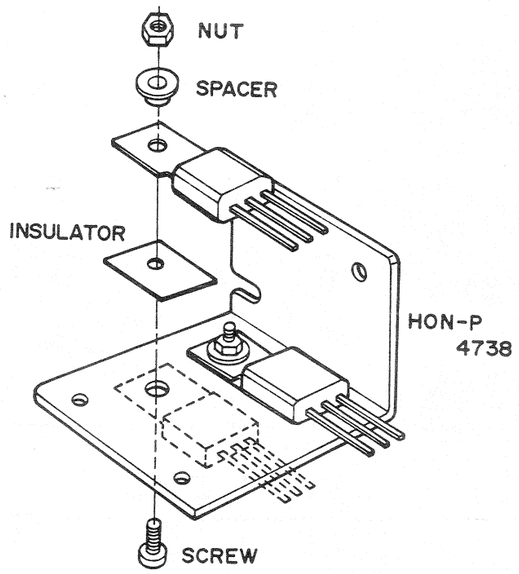


Figure 8 Power Transistor Replacement

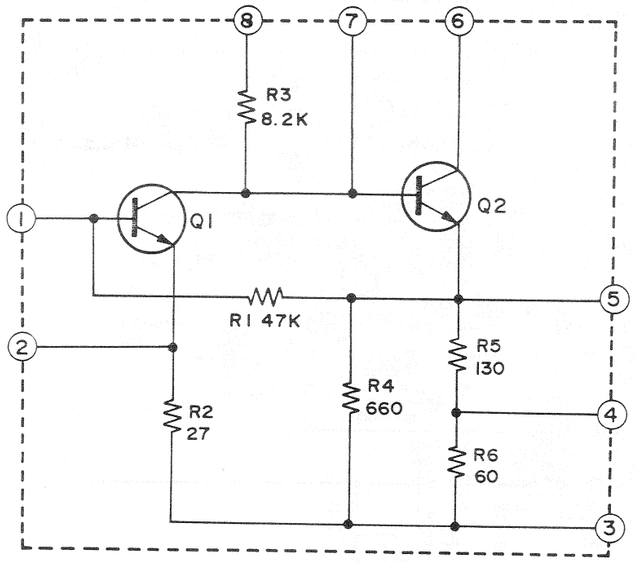


Figure 9 Equivalent Circuit of Integrated Circuit

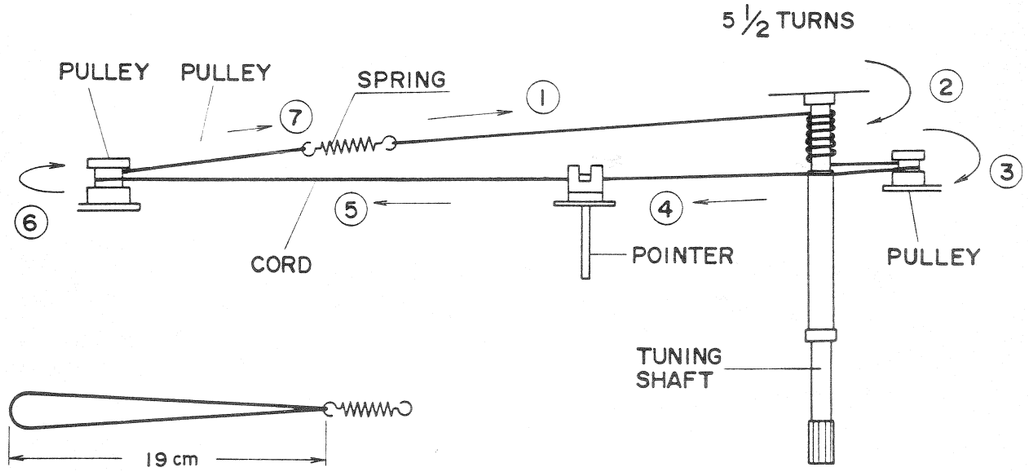


Figure 10 Dial Cord Stringing

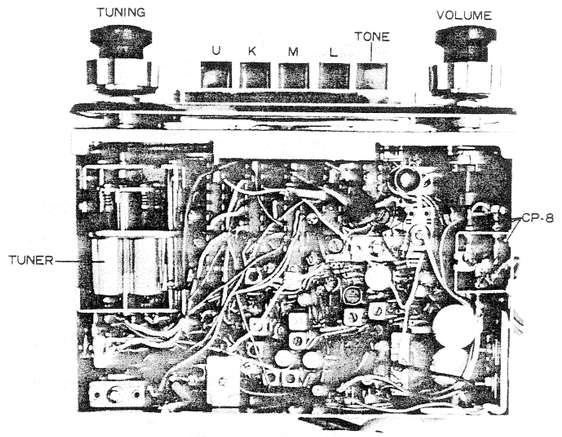


Figure 11 Chassis Layout

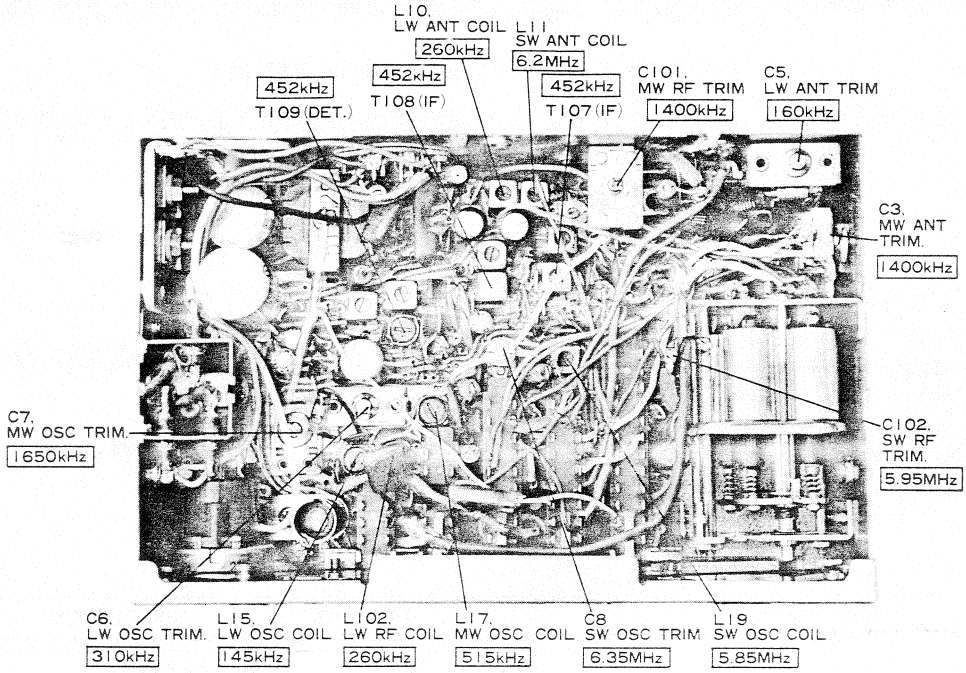


Figure 12 AM Alignment Points

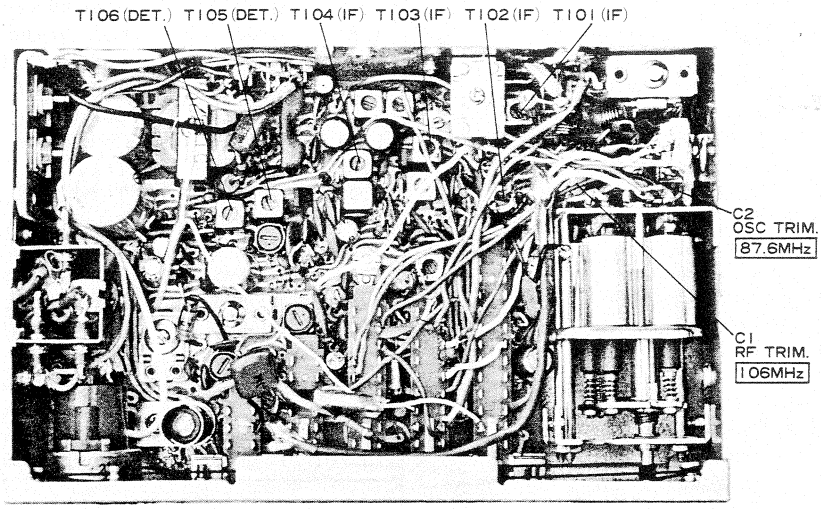


Figure 13 FM Alignment Points

MODEL
AR-943

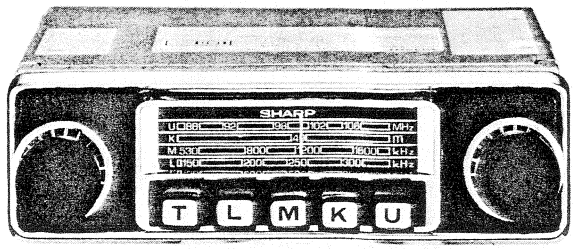
SHARP

PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION



MODEL

AR-943

SEMICONDUCTORS

REF. NO.	PART NO.	DESCRIPTION
Q1	2SC535 Ⓑ	Transistor, FM RF
Q2	2SC461 Ⓑ	Trnasistor, FM Mixer
Q3	2SC461 Ⓐ	Transistor, FM Oscillator
Q101	2SC460 Ⓑ	Transistor, 1st FM IF & AM RF
Q102	2SC460 Ⓐ	Transistor, 2nd FM IF & AM Converter
Q103	2SC460 Ⓒ	Transistor, 3rd FM IF & 1st AM IF
Q104	2SC460 Ⓒ	Transistor, 4th FM IF & 2nd AM IF
Q201, Q202	2SC1243 Ⓓ	Transistor, Audio Output (Matched Pair)
IC-201	IC-921	Integrated Circuit, Audio Amp. & Driver
D1, D2	1S2076	Diode, Protection Against Static Destruction
D4	1N60	Diode, FM Overload
D5	HZ7 GR	Diode, Voltage Stabilizer
D6	1S85 YL	Diode, FM AFC
D7, D8	1S2076	Diode, Protection Against Static Destruction
D101	1N34A	Diode, AM Detector
D102, D103	1N60 Ⓟ	Diode, FM Detector (Matched Pair)
D104	HV-46 GR	Diode, Voltage Stabilizer
D105	1N34A	Diode, AM AVC
D106	1N34A	Diode, AM AVC
D107	1N60	Diode, FM Overload
D201	1S1209 (3)	Diode, Temperature Compensation
D202	1S1209 (3)	Diode, Temperature Compensation

COILS AND TRANSFORMERS

REF. NO.	PART NO.	DESCRIPTION
L1,L2, L3,L4, L101	SXPT-934	Coil, Tuner L1, FM RF L2, FM Oscillator L3, AM Antenna L4, AM Oscillator L101, AM RF
L5	7L-597C	Coil, FM Antenna
L6	7L-992	Coil, FM Antenna
L7	7L-597C	Coil, FM Antenna
L8	7L-933	Coil, FM RF
L9	7L-925	Coil, Emitter Choke
L10	37L-118A	Coil, LW Antenna
L11	8L 211A	Coil, SW Antenna
L12	7L-952	Coil, Choke
L13	7L-920	Coil, Choke
L14	8L-916	Coil, LW Oscillator
L15	8L-370B	Coil, LW Oscillator
L16	7L-921	Coil, MW Oscillator
L17	8L-357B	Coil, MW Oscillator
L18	7L-921	Coil, SW Oscillator
L19	8L-305B	Coil, SW Oscillator
L102	7L-660C	Coil, LW RF
L103	7L-952	Coil, SW RF
L201	8L-917	Coil, Choke
T101	7IF-894	Transformer, 1st FM IF
T102	7IF-894	Transformer, 2nd FM IF
T103	7IF-750	Transformer, 3rd FM IF
T104	7IF-894	Transformer, 4th FM IF
T105	7IF-895	Transformer, FM Discriminator
T106	7IF-896	Transformer, FM Discriminator
T107	7IF-825	Transformer, 1st AM IF
T108	7IF-892	Transformer, 2nd AM IF
T109	8IF-707	Transformer, AM Detector
T201	6T-828	Transformer, Driver
T202	9T-740	Transformer, Power Choke
CF-101	FILTER	Filter, 452 kHz

CAPACITORS

REF. NO.	PART NO.	DESCRIPTION
C1	TO-705	Trimmer Capacitor, FM RF
C2	TO-705	Trimmer Capacitor, FM Oscillator
C3	XTO-707	Trimmer Capacitor, MW Antenna
C5	XTO-728	Trimmer Capacitor, LW Antenna
C6	TO-729	Trimmer Capacitor, LW Oscillator

SHARP

PARTS LIST

MODEL
AR-943

REF. NO.	PART NO.	DESCRIPTION
C7	TO-846	Trimmer Capacitor, MW Oscillator
C8	TO-725	Trimmer Capacitor, SW Oscillator
C9	D-5-228J	22PF, 50V, ± 5%, Discap
C10	DS-5-398J	39PF, 50V, ± 5%, Discap
C11	D-5-309C	3PF, 50V, ± 0.25PF, Discap
C12	D-5-188J	18PF, 50V, ± 5%, Discap
C13	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C14	DS-5-158J	15PF, 50V, ± 5%, Discap
C15	D-5-226Z	.0022MFD, 50V, + 80 −20%, Discap
C16	D-5-278J	27PF, 50V, ± 5%, Discap
C17	D-5-226Z	.0022MFD, 50V, + 80 −20%, Discap
C18	DS-5-107J	100PF, 50V, ± 5%, Discap
C19	DS-5-688J	68PF, 50V, ± 5%, Discap
C20	D-5-108J	10PF, 50V, ± 5%, Discap
C21	DCJ-5-209C	2PF, 50V, ± 0.25PF, Discap
C22	D-5-338J	33PF, 50V, ± 5%, Discap
C23	ML-5-106M	.001MFD, 50V, ± 20%, Mylar
C24	D-5-476Z	.0047MFD, 50V, + 80 −20%, Discap
C25	ML-5-105M	.01MFD, 50V, ± 20%, Mylar
C26	DUJ-5-309C	3PF, 50V, ± 0.25PF, Discap
C27	DCH-5-338J	33PF, 50V, ± 5%, Discap
C28	D-5-106Z	.001MFD, 50V, + 80 −20%, Discap
C29	DWK-5-609D	6PF, 50V, ± 0.5PF, Discap
C30	D-5-105Z	.01MFD, 50V, + 80 −20%, Discap
C31	CU-1-101Q	100MFD, 10V, + 100 −10%, Electrolytic
C32	D-3-105Z5T	.01MFD, 30V, + 80 −20%, Discap
C33	D-3-105Z5T	.01MFD, 30V, + 80 −20%, Discap
C34	ML-5-106M	.001MFD, 50V, ± 20%, Discap
C35	D-5-335P	.033MFD, 50V, + 100 −0%, Discap
C36	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C37	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C38	DS-5-397J	390PF, 50V, ± 5%, Discap
C39	S-5-126J	1200PF, 50V, ± 5%, Styrol
C40	DS-5-688J	68PF, 50V, ± 5%, Discap
C41	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C42	CU1.6-472Q	47MFD, 16V, + 100 −10%, Electrolytic
C43	S-5-126J	1200PF, 50V, ± 5%, Styrol
C44	S-5-127J	120PF, 50V, ± 5%, Styrol
C45	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C46	DTH-5-207J	200PF, 50V, ± 5%, Discap
C47	ML-5-105M	.01MFD, 50V, ± 20%, Mylar
C48	DUJ-5-127J	120PF, 50V, ± 5%, Discap
C49	ML-5-226M	.0022MFD, 50V, ± 20%, Mylar
C50	ML-5-154M	.15MFD, 50V, ± 20%, Mylar

REF. NO.	PART NO.	DESCRIPTION
C101	XTO-711	Trimmer Capacitor, MW RF
C102	TO-705	Trimmer Capacitor, SW RF
C103	D-5-105M	.01MFD, 50V, ± 20%, Discap
C104	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C105	S-5-226J	2200PF, 50V, ± 5%, Styrol
C106	DS-5-688J	68PF, 50V, ± 5%, Discap
C107	D-5-338J	33PF, 50V, ± 5%, Discap
C108	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C109	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C110	D-5-105M	.01MFD, 50V, ± 20%, Discap
C111	S-5-226J	2200PF, 50V, ± 5%, Styrol
C112	ML-5-226M	.0022MFD, 50V, ± 20%, Mylar
C113	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C114	D-5-159C	1.5PF, 50V, ± 0.25PF, Discap
C115	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C116	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C117	D-5-059C	.5PF, 50V, ± 0.25PF, Discap
C118	D-5-309C	3PF, 50V, ± 0.25PF, Discap
C119	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C120	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C121	CU1.6-102Q	10MFD, 16V, + 100 −10%, Electrolytic
C122	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C123	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C124	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C125	D-5-109C	1PF, 50V, ± 0.25PF, Discap
C127	D-5-228J	22PF, 50V, ± 5%, Discap
C128	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C129	D-5-309C	3PF, 50V, ± 0.25PF, Discap
C130	DS-5-477J	470PF, 50V, ± 5%, Discap
C131	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C132	CU-06-472Q	47MFD, 6.3V, + 100 −10%, Electrolytic
C133	CU1.6-221Q	220MFD, 16V, + 100 −10%, Electrolytic
C134	CU1.6-102Q	10MFD, 16V, + 100 −10%, Electrolytic
C135	ML-5-105M	.01MFD, 50V, ± 20%, Mylar
C136	DS-5-157J	150PF, 50V, ± 5%, Discap
C201	AD-06-104M	.1MFD, 6.3V, ±20%, Aluminum Electrolytic
C202	ML-5-226M	.0022MFD, 50V, ± 20%, Mylar
C203	CU2.5-333R	3.3MFD, 25V, + 150 −10%, Electrolytic
C204	ML-5-335M	.033MFD, 50V, ± 20%, Mylar
C205	DS-5-688J	68PF, 50V, ± 5%, Discap
C206	CU-06-101Q	100MFD, 6.3V, + 100 −10%, Electrolytic
C207	ML-5-105M	.01MFD, 50V, ± 20%, Mylar
C208	ML-5-105M	.01MFD, 50V, ± 20%, Mylar
C209	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C210	ML-5-225M	.022MFD, 50V, ± 20%, Mylar
C211	CU1.6-100Q	1000MFD, 16V, + 100 −10%, Electrolytic

MODEL
AR-943

SHARP

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
C212	CU2.5-471Q	470MFD, 25V, + 100 −10%, Electrolytic
C213	CP-8	.001MFD, Feed Through
C214	CP-8	.001MFD, Feed Through
C215	D-5-225Z	.022MFD, 50V, + 80 −20%, Discap
C216	ML-5-106M	.001MFD, 50V, ± 20%, Mylar
C217	CU1.6-102R	10MFD, 16V, + 150 −10%, Electrolytic
C218	D-2.5-104Z	.1MFD, 25V, +80 −20%, Discap
C219	CP-8	.001MFD, Feed Through
C220	CU2.5-471Q	470MFD, 25V, + 100 −10%, Electrolytic

RESISTORS

All resistors without specification are ¼W, ±10%, Carbon type.

R1	¼SU-1.8KK	1.8K ohm
R2	¼SU-15KK	15K ohm
R3	¼SU4.7KK	4.7K ohm
R5	¼SA-1KK	1K ohm
R6	¼SU4.7KK	4.7K ohm
R7	¼SU-1KK	1K ohm
R8	¼SA-100K	100 ohm
R9	¼SU-1KK	1K ohm
R10	¼SU4.7KK	4.7K ohm
R11	¼SU-22KK	22K ohm
R12	¼SU-220K	220 ohm
R14	¼SU100KK	100K ohm
R15	¼SU6.8KK	6.8K ohm
R16	¼SU100KK	100K ohm
R17	¼SU-10KK	10K ohm
R18	¼SU-10KK	10K ohm
R19	¼SU-18K	18 ohm
R101	¼SU-330K	330 ohm
R102	¼SU2.2KK	2.2K ohm
R103	¼SU1.5KK	1.5K ohm
R104	¼SA-15KK	15K ohm
R105	¼SU-560K	560 ohm
R106	¼SU-1KK	1K ohm
R107	¼SU-1KK	1K ohm
R108	¼SU-1KK	1K ohm
R109	¼SU-15K	15 ohm
R110	¼SU-220K	220 ohm
R111	¼SA-68KK	68K ohm
R112	¼SU220KK	220K ohm
R113	¼SU2.2KK	2.2K ohm
R114	¼SU-1KK	1K ohm
R115	¼SU1.5KK	1.5K ohm
R116	¼SU-100K	100 ohm
R117	¼SU4.7KK	4.7K ohm
R118	¼SA-560K	560 ohm
R119	¼SU-220K	220 ohm
R120	¼SU-220K	220 ohm
R121	¼SU2.2KK	2.2K ohm
R122	¼SA220KK	220K ohm
R123	¼SU2.2KK	2.2K ohm
R124	¼SU-1KK	1K ohm
R125	¼SU-1KK	1K ohm
R126	¼SA1.2KK	1.2K ohm
R127	¼SA470KK	470K ohm
R129		0 to 100 ohm
R201/SW1	8V-824	5K ohm, Volume with Power Switch
R202	¼SU-1KK	1K ohm
R203	¼SU-100K	100 ohm
R204	¼SU-10K	10 ohm
R205	¼SU-2.7J	2.7 ohm, ¼W, ± 5%, Carbon
R206	¼SU-27K	27 ohm
R207	1POB-100K	100 ohm, 1W, ±10%, Oxide Film
R208	¼SU-2.7J	2.7 ohm, ¼W, ±5%, Carbon
R209	¼SU-27K	27 ohm
R210	1POB-100K	100 ohm, 1W, ±10%, Oxide Film
R211	¼SU-12KK	12K ohm
R212	2PO-15K	15 ohm, 2W, ±10%, Oxide Film

PACKAGED CIRCUITS

M101	PRC-335	Capristor, 470 ohm + .01MFD x 2
M102	PRC-503	Capacitor, 4.7K ohm x 2 + 330PF x 3

MISCELLANEOUS

	PANEL-4144-01	Panel, Decoration
	9K-394-01	Knob, Tuning and Volume, Rubber
	9K-395-01	Knob, Tuning and Volume, Metal
	9K-396-01	Knob, Tone
	9K-399-01	Knob, LW
	9K-400-01	Knob, MW
	9K-401-01	Knob, K (SW)
	9K-402-01	Knob, U (FM)
	9CAB-4144B	Cabinet, Top and Bottom
	SISIN-4144-01	Pointer, Dial
	DIAL-4738-01	Dial Scale
	DIALP4144A	Backplate, Dial Scale
	DEC-M4144-01	Metal, Decoration, Front Frame
	DEC-P4144A-01	Decoration Plate, Right (Black)
	DEC-P4144B-01	Decoration Plate, Left (Black)
	DIAL-BANE	Spring, Dial Retaining
	SPAC-4144	Spacer, Knob
	HARIITO	Dial Cord String
	SPRING	Spring, Dial Cord
	X9CAB4144D	Cabinet, Front
	X9CAB-4738	Cabinet, Body
SW2	X36S-54	Switch, Band Selector and Tone
S2	SO-003	Socket, DIN Cord
S1	SO-045	Socket, External Antenna
	SO-950	Socket, Polarity Selector
	SO-229	Socket, Pilot Lamp
	FH-929	Holder, Fuse
	HON-P4738	Heat Sink
	ACC-732	Cord, Speaker
	PWB-4738	Printed Wiring Board
	PG-169	Plug, Polarity Selector
	PWB-BANE	Spring, Printed Wiring Board Retaining
PL201	3PL-504	Lamp, Pilot
	PC-903	Cover, Pilot Lamp
	3FUSE-1.2A	Fuse, 1.2A
	XCP-27-1	Speaker Box Assembly
	SHICON-021	Shield Case, Capacitors (CP-8)
	3CAB-4737	Cabinet, Speaker
	IND-P4660E	Indication Plate, Speaker
SP-1	12P-814	Speaker
	SP-ANG4737	Bracket, Speaker

A2805-2.1MNK
Printed in Japan